Abstract

Improvement in Coatings on Substrates

A process for the production of a photocatalytically active self-cleaning coated substrate, especially a glass substrate, which comprises depositing a titanium oxide coating on the surface of the substrate by contacting it with a fluid mixture containing a source of titanium and a source of oxygen, the substrate being at a temperature of at least 600°C. The coated surface has good durability, a high photocatalytic activity and a low visible light reflection. Most preferably the deposition temperature is in the range 645°C to 720°C which provides especially good durability.

The fluid mixture preferably contains titanium chloride and an ester, especially ethyl acetate.

Also disclosed is a self cleaning coated substrate, especially a glass substrate, having high photocatalytic activity and low visible light reflection and a durable self-cleaning coated glass.